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APPLICATION NO). I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/238,163		01/28/1999	HIROSHI SUMIYAMA	032567-002	6659
21839	7590	05/17/2004		EXAMINER	
		WECKER & MA	POKRZYWA, JOSEPH R		
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				2622	O) :

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·	Application	n No.	Applicant(s)-			
	09/238,16	3	SUMIYAMA ET AL.			
Office Action Summary	Examiner		Art Unit			
	Joseph R.	Pokrzywa	2622			
The MAILING DATE of this communication Period for Reply			correspondence address			
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above is less than thirty (30) days, and If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by significant properties of the	ON. FR 1.136(a). In no even. a reply within the statueriod will apply and will tatute, cause the appli	nt, however, may a reply be tin tory minimum of thirty (30) day expire SIX (6) MONTHS from cation to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D. (35 U.S.C. & 133)			
Status						
1) Responsive to communication(s) filed on $\underline{0}$	05 March 2004.					
2a) This action is FINAL . 2b) ⊠ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1,4 and 6-19</u> is/are pending in the	annlication					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1,4 and 6-19 is/are rejected.						
·						
 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 						
are subject to restriction an	id/or election re	quirement.				
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to						
			• •			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
			7.6.1.6.1.6.1.1.1.1.1.6.1.62.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:			,			
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a l	list of the certific	ed copies not received	d.			
Attachment(s)						
1) Dotice of References Cited (PTO-892)		. □	DTO 440			
2) Notice of Praftsperson's Patent Drawing Review (PTO-948)	2	l) Interview Summary (Paper No(s)/Mail Dat				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/			tent Application (PTO-152)			
Paper No(s)/Mail Date		i)	•			
6. Patent and Trademark Office FOL-326 (Rev. 1-04) Office	e Action Summary		Part of Paper No./Mail Date 24			

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/5/04 has been entered.

Response to Amendment

2. Applicant's amendment was received on 3/5/04, and has been entered and made of record. Currently, claims 1, 4, and 6-19 are pending.

Response to Arguments

3. Applicant's arguments filed 3/5/04 have been fully considered but they are not persuasive.

In response to applicant's arguments regarding the rejection of *claim 1*, which was cited in the Office action dated 9/5/03 as being anticipated by Hirata *et al.* (U.S. Patent Number 5,113,520), whereby applicant argues on pages 9-12 that Hirata fails to specifically teach of the now amended limitation that was formerly in dependent claim 3, which requires an output control unit for causing the output unit to output image data newly input from the image input unit under the maintained image forming conditions.

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The examiner believes the main issue regarding the claim lies in the interpretation of the phrase "image data newly input". It is noted that "newly input" is not, in itself, clear as to exactly when data is being input. The image data can be newly input before printing is started, or the image data can be newly input before or after discarding of image data in the first memory.

The applicant explains on page 11 that the image forming apparatus of claim 1 includes the ability to output image data newly input from the image input unit under the image forming conditions that are maintained in the second memory, even when the image data of the first memory is discarded. However, this feature is not clear as the claim is currently written. The examiner suggests clarifying this by possibly amending the limitation to read "output image data newly input from the image input unit after the discarding of image data from the first memory under the maintained image forming conditions.

Given the uncertainty as to when the image data is "newly input", as noted above, the limitation in claim 1 can be interpreted as being anticipated by Hirata. Particularly, Hirata teaches of an output control unit for causing the output unit to output image data newly input from the image input unit under the maintained image forming conditions (column 4, lines 37 through 57, wherein as seen in Fig. 3B, at step S260, when an execute print key is pressed, image data which was newly input by the image input unit, noted as the keyboard 10, is printed during the printing routine in step S290).

Continuing, applicant argues on page 12 that Hirata does not teach that the key buffer 41 is used to store image forming conditions. As read in column 2, lines 39 through 44 of Hirata, "key code data" is stored in the key buffer 41. Further, as read in column 3, lines 36 through 40, a "key code data" corresponds to an operated key from the keyboard controller 20. Thus, the

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"key code data" that is stored in the key buffer 41 can be interpreted as being image forming conditions since the image that is to be formed is based on the data that is stored in the buffer, thereby being an image forming condition.

4. Therefore, the rejection of independent claim 1, as cited in the Office action dated 9/5/03, under 35 U.S.C. 102(b), being anticipated by Hirata *et al.*, is maintained and repeated in this Office action. Further, for the same reasons discussed above, the rejection of independent claims 16 and 19, as cited in the Office action dated 9/5/03, under 35 U.S.C. 102(b), being anticipated by Hirata *et al.*, are also maintained and repeated in this Office action. Similarly, the rejection of independent claim 10, as cited in the Office action dated 9/5/03, under 35 U.S.C. 103(a), being unpatentable over Hirata *et al.* in view of Hanamoto (U.S. Patent Number 5,152,001), is also maintained and repeated in this Office action.

Claim Objections

5. Claim 4 is objected to because of the following informalities:

In claim 4, line 1 "claim 3" should read "claim 1", as claim 3 was canceled.

Appropriate correction is required.

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1, 4, 9, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirata et al. (U.S. Patent Number 5,113,520, cited in the Office action dated 9/5/03).

Regarding claim 1, Hirata discloses an image forming apparatus, comprising a first memory for storing image data (print data memory 45, column 2, lines 49 through 55), an image input unit for inputting the image data to the first memory (column 1, lines 44 through 54, and column 3, line 57 through column 4, line 44), a second memory for storing image forming conditions (key buffer 41, column 2, lines 39 through 44, column 2, lines 65 through 68, and column 3, lines 36 through 48), an image output unit for printing the image data stored in the first memory under the image forming conditions stored in the second memory (column 3, lines 4 through 48, and column 6, lines 37 through 44), command unit for generating a command of discarding the image data being printed from the image output unit (cancel key 19, column 4, lines 50 through 64), an image data discarding controller (CPU 30) for discarding the image data stored in the first memory when the command of discarding the image data is generated by the command unit (column 2, lines 24 through 55, and column 4, lines 58 through 64), while maintaining the associated image forming conditions stored in the second memory (column 4, lines 50 through 64, and column 6, lines 37 through 51), a job stopping controller for stopping a print operation of a job being printed by the image output unit (being the job within the print

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reservation memory 46, column 2, lines 39 through 56, column 4, lies 45 through 64, and column 6, lines 29 through 51), and an output control means for causing the output unit to output image data newly input from the image input unit under the maintained image forming conditions (column 4, lines 37 through 57, wherein as seen in Fig. 3B, at step S260, when an execute print key is pressed, image data which was newly input by the image input unit, noted as the keyboard 10, is printed during the printing routine in step S290), wherein the command unit generates a command of discarding the image data of the job stopped by the job stopping controller (column 2, lines 24 through 55, and column 4, lines 58 through 64), and wherein the image data discarding controller discards the image data of the job stopped by the job stopping controller and maintains the image forming conditions of the job (column 4, lines 50 through 64, and column 6, lines 37 through 51).

Regarding *claim 4*, Hirata discloses the image forming apparatus discussed above in claim 1, and further teaches of means for changing the maintained image forming conditions (column 2, lines 11 through 68, and column 3, lines 20 through 56).

Regarding *claim 9*, Hirata discloses the image forming apparatus discussed above in claim 1, and further teaches that the image output unit is a printer for printing an image on a paper based on the image data (column 3, lines 4 through 17).

Regarding *claim 16*, Hirata discloses an image forming method, comprising storing image data in an image memory (print data memory 45, column 2, lines 49 through 55), storing image forming conditions for the image data in a memory (key buffer 41, column 2, lines 39 through 44, column 2, lines 65 through 68, and column 3, lines 36 through 48), printing an image on a paper (column 3, lines 4 through 17), based on the image data stored in the image memory,

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under the image forming conditions stored in the memory (column 3, lines 20 through 48, and column 6, lines 37 through 44), generating a command of discarding the image data whose image is being printed (cancel key 19, column 4, lines 50 through 64), stopping a print operation of the image data being printed and erasing the image data from the image memory in response to the command, while maintaining the associated image forming conditions in the memory (column 4, lines 50 through 64, and column 6, lines 37 through 51), acquiring new image data and storing the new image data in the image memory (column 5, line 54 through column 6, line 36), and printing a new image on a paper, based on the newly acquired image data, under the image forming conditions maintained in the memory (column 6, lines 37 through 51, whereby as seen in Fig. 3B, at step S260, when an execute print key is pressed, image data which was newly input by the image input unit, noted as the keyboard 10, is printed during the printing routine in step S290).

Regarding *claim 17*, Hirata discloses the image forming method discussed above in claim 16, and further teaches of the step of changing the maintained image forming conditions (column 2, lines 11 through 68, and column 3, lines 20 through 56).

Regarding *claim 18*, Hirata discloses the image forming method discussed above in claim 16, and further teaches of the step of printing image data of another print job on a waiting list after the newly acquired image data has completely been printed (column 5, line 15 through column 6, line 51).

Regarding *claim 19*, Hirata discloses an image forming apparatus, comprising a first memory for storing image data (print data memory 45, column 2, lines 49 through 55), a second memory for storing image forming conditions (key buffer 41, column 2, lines 39 through 44,

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column 2, lines 65 through 68, and column 3, lines 36 through 48), an image output unit for printing the image data stored in a first memory under the image forming conditions stored in the second memory (column 3, lines 4 through 48, and column 6, lines 37 through 44), a command unit for generating a command of discarding the image data being printed from the image output unit (cancel key 19, column 4, lines 50 through 64), an image data discarding controller (CPU 30) for discarding the image data stored in the first memory when the command of discarding the image data is generated by the command means (column 2, lines 24 through 55, and column 4, lines 58 through 64), while maintaining the associated image forming conditions stored in the second memory (column 4, lines 50 through 64, and column 6, lines 37 through 51), and a job stopping controller for stopping a print operation of a job being printed by the image output unit (being the job within the print reservation memory 46, column 2, lines 39 through 56, column 4, lies 45 through 64, and column 6, lines 29 through 51), wherein the command unit generates a command of discarding the image data of the job stopped by the job stopping controller (column 2, lines 24 through 55, and column 4, lines 58 through 64), and wherein the image data discarding controller discards the image data of the job stopped by the job stopping controller and maintains the image forming conditions of the job (column 4, lines 50 through 64, and column 6, lines 37 through 51), an image input unit for inputting image data to the first memory (column 1, lines 44 through 54, and column 3, line 57 through column 4, line 44), and an output control unit for causing the output unit to output image data newly input from the image input unit under the maintained image forming conditions (column 4, lines 37 through 57), wherein the first memory stores a plurality of image data, and the output control means gives priority to the newly inputted image data to be printed under the maintained image forming conditions over the

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rest of the image data (column 3, line 36 through column 4, line 57, whereby as seen in Fig. 3B, at step S260, when an execute print key is pressed, image data which was newly input by the image input unit, noted as the keyboard 10, is printed during the printing routine in step S290).

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 6-8, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata *et al.* (US. Patent Number 5,113,520, cited in the Office action dated 9/5/03) in view of Hanamoto (U.S. Patent Number 5,152,001, cited in the Office action dated 9/5/03).

Regarding *claim* 6, Hirata discloses the image forming apparatus discussed above in claim 1, but fails to disclose expressly if the image input unit is an image reader for reading the image from the original and acquiring the image data, wherein the image output unit and the image reader operate independently.

Hanamoto discloses an image forming apparatus, comprising a first memory for storing image data (electrical load 54, column 40 through 53), a second memory for storing image forming conditions (column 2, lines 20 through 38, and column 4, lines 48 through 57), an image output unit for printing the image data stored in the first memory under the image forming conditions stored in the second memory (column 3, lines 17 through 54), a command unit for generating a command of discarding the image data being printed from the image output unit

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(column 4, lines 8 through 35), an image data discarding controller for discarding the image data stored in the first memory when the command of discarding the image data is generated by the command unit (column 4, lines 8 through 60), while maintaining the associated image forming conditions stored in the second memory (column 4, lines 8 through 35). Further, Hanamoto teaches that the image input unit is an image reader for reading the image from the original and acquiring the image data (column 3, lines 32 through 47), wherein the image output unit and the image reader operate independently (column 3, lines 17 through 47).

Hirata & Hanamoto are combinable because they are in the same field of endeavor, as they both are systems that process input data, and they both print an image on paper as an output.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Hirata's system with the teachings of Hanamoto.

The suggestion/motivation for doing so would have been that Hirata's system would become more widely used, since image data would be able to be input through a scanner, as recognized by Hanamoto, therein allowing users to process more types of image data.

Therefore, it would have been obvious to combine the teachings of Hanamoto with the system of Hirata to obtain the invention as specified in claim 6.

Regarding *claim* 7, Hirata and Hanamoto disclose the image forming apparatus discussed above in claim 6, and Hanamoto further teaches that the image reader is reading another original, the command unit generates a command of suspending the reading operation, and at the same time, it generates a command of discarding the image data to be printed (column 3, line 32 through column 4, line 60, and column 6, lines 8 through 57).

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As discussed above, Hirata & Hanamoto are combinable because they are in the same field of endeavor, as they both are systems that process input data, and they both print an image on paper as an output.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Hirata's system with the teachings of Hanamoto.

The suggestion/motivation for doing so would have been that Hirata's system would become more widely used, since image data would be able to be input through a scanner, as recognized by Hanamoto, therein allowing users to process more types of image data.

Therefore, it would have been obvious to combine the teachings of Hanamoto with the system of Hirata to obtain the invention as specified in claim 7.

Regarding *claim 8*, Hirata and Hanamoto disclose the image forming apparatus discussed above in claim 6, and Hanamoto further teaches that if the image reader is reading another original, the command unit generates a command of discarding the image data to be printed after the reading operation for another original has been completed (column 3, line 32 through column 4, line 60, and column 6, lines 8 through 57).

As discussed above, Hirata & Hanamoto are combinable because they are in the same field of endeavor, as they both are systems that process input data, and they both print an image on paper as an output.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Hirata's system with the teachings of Hanamoto.

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The suggestion/motivation for doing so would have been that Hirata's system would become more widely used, since image data would be able to be input through a scanner, as recognized by Hanamoto, therein allowing users to process more types of image data.

Therefore, it would have been obvious to combine the teachings of Hanamoto with the system of Hirata to obtain the invention as specified in claim 8.

Regarding claim 10, Hirata discloses an image forming apparatus, comprising an image reader for acquiring image data of an original (column 1, lines 31 through 54), an image memory for storing image data acquired by the image reader (print data memory 45, column 2, lines 49 through 55), a mode memory for storing image forming conditions selected for the acquired image data (key buffer 41, column 2, lines 39 through 44, column 2, lines 65 through 68, and column 3, lines 36 through 48), a printer for printing an image on paper, based on the image data stored in the image memory, under the image forming conditions stored in the mode memory (column 3, lines 4 through 48, and column 6, lines 37 through 44), a command unit for generating a command of discarding the image data being printed by the printer (cancel key 19, column 4, lines 50 through 64), an image data discarding controller (CPU 30) for discarding the image data stored in the image memory when the command of discarding the image data is generated by the command unit (column 2, lines 24 through 55, and column 4, lines 58 through 64), while maintaining the associated image forming conditions stored in the mode memory (column 4, lines 50 through 64, and column 6, lines 37 through 51), and a job stopping controller for stopping a print operation of a job being printed by the printer (being the job within the print reservation memory 46, column 2, lines 39 through 56, column 4, lines 45 through 64, and column 6, lines 29 through 51), wherein the command unit generates a command of discarding

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the image data of the job stopped by the job stopping controller (column 2, lines 24 through 55, and column 4, lines 58 through 64), and wherein the image data discarding controller discards the image data of the job stopped by the job stopping controller and maintains the image forming conditions of the job (column 4, lines 50 through 64, and column 6, lines 37 through 51).

However, Hirata fails to expressly disclose of an image reader for reading an original and acquiring image data of the original, and a print control unit for causing the printer to print another image data newly read by the image reader under the maintained image forming conditions in the mode memory.

Hanamoto discloses an image forming apparatus, comprising an image reader for reading an original and acquiring image data of an original (column 3, lines 17 through 54), a mode memory for storing image forming conditions selected for the acquired image data (read-write memory 55), a printer for printing an image on paper, based on the image data stored in the image memory, under the image forming conditions stored in the mode memory (column 3, line 48 through column 4, line 35), a command unit for generating a command of discarding the image data being printed by the printer (column 4, lines 8 through 35), an image data discarding controller for discarding the image data stored in the image memory when the command of discarding the image data is generated by the command unit (column 4, lines 8 through 60), while maintaining the associated image forming conditions stored in the mode memory (column 4, lines 8 through 35), and a print control unit for causing the printer to print another image data newly read by the image reader under the maintained image forming conditions in the mode memory (column 3, line 32 through column 4, line 60, and column 5, lines 24 through 63).

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Hirata & Hanamoto are combinable because they are in the same field of endeavor, as they both are systems that process input data, and they both print an image on paper as an output.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Hirata's system with the teachings of Hanamoto.

The suggestion/motivation for doing so would have been that Hirata's system would become more widely used, since image data would be able to be input through a scanner, as recognized by Hanamoto, therein allowing users to process more types of image data.

Therefore, it would have been obvious to combine the teachings of Hanamoto with the system of Hirata to obtain the invention as specified in claim 10.

Regarding *claim 11*, Hirata and Hanamoto disclose the image forming apparatus discussed above in claim 10, and Hirata further teaches of a changing means for changing the maintained image forming conditions (column 2, lines 11 through 68, and column 3, lines 20 through 56).

Regarding *claim 12*, Hirata and Hanamoto disclose the image forming apparatus discussed above in claim 10, and Hirata further teaches that the image reader and the printer operate independently (column 1, lines 37 through 54), and the image memory stores image data for a plurality of jobs (column 2, lines 39 through 64, and column 5, lines 6 through 66).

Regarding *claim 13*, Hirata and Hanamoto disclose the image forming apparatus discussed above in claim 12, and Hirata further teaches of a print control unit that gives priority to a new job for printing under the maintained forming conditions over the rest of the jobs on a waiting list (column 5, line 15 through column 6, line 28).

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Regarding *claim 14*, Hirata and Hanamoto disclose the image forming apparatus discussed above in claim 12, and Hanamoto further teaches that if the image reader is reading another original, the command unit generates a command of suspending the reading operation, and at the same time, it generates a command of discarding the image data to be printed (column 3, line 32 through column 4, line 60, and column 6, lines 8 through 57).

As discussed above, Hirata & Hanamoto are combinable because they are in the same field of endeavor, as they both are systems that process input data, and they both print an image on paper as an output.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Hirata's system with the teachings of Hanamoto.

The suggestion/motivation for doing so would have been that Hirata's system would become more widely used, since image data would be able to be input through a scanner, as recognized by Hanamoto, therein allowing users to process more types of image data.

Therefore, it would have been obvious to combine the teachings of Hanamoto with the system of Hirata to obtain the invention as specified in claim 14.

Regarding *claim 15*, Hirata and Hanamoto disclose the image forming apparatus discussed above in claim 12, and Hanamoto further teaches that if the image reader is reading another original, the command unit generates a command of discarding the image data to be printed after the reading operation for another original has been completed (column 3, line 32 through column 4, line 60, and column 6, lines 8 through 57).

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As discussed above, Hirata & Hanamoto are combinable because they are in the same field of endeavor, as they both are systems that process input data, and they both print an image on paper as an output.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Hirata's system with the teachings of Hanamoto.

The suggestion/motivation for doing so would have been that Hirata's system would become more widely used, since image data would be able to be input through a scanner, as recognized by Hanamoto, therein allowing users to process more types of image data.

Therefore, it would have been obvious to combine the teachings of Hanamoto with the system of Hirata to obtain the invention as specified in claim 15.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa

Examiner

Art Unit 2622 rough R Phym

jrp